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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/678,394

10/03/2003

Keith Marshall

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EXAMINER

NGUYEN, TUAN N

ART UNIT

PAPER NUMBER

3751

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/678,394

Applicant(s)

MARSHALL, KEITH

Examiner

Tuan N. Nguyen

Art Unit

3751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/6/06 have been fully considered but they are not persuasive. With respect to the applicant's argument against the Morris reference on page 11, the Morris valve does have an opened position and a closed position, which can be called "normally-closed position"; furthermore, nowhere in claims 1 and 15 is claiming the sensor is within the bowl as argued. Contrary to the applicant's assertion that Morris sensor does not sense the liquid level within and that "the actuator can only be moved to the flushing position if, "the receipt of the electrical signal having a value indicative of the liquid level within the bowl (emphasis added) is below a predetermined level"". Not only that exact language is not in the claim, the Morris reference clearly discussed the operation when the toilet bowl drain is obstructed (see col. 6, line 45+). If the liquid in the toilet does not reach the toilet rim and into the pipe 20 (the predetermined level), the flushing operation will and continue to operate. Normal flushing will not result in the liquid being maintained within pipe 20; therefore, the sensor will continue to allow the flushing operation until the water level within the bowl reaches the toilet rim and into pipe 20. Regarding claim 9, the Quintana teaches the mounting of the leak sensor 12 can be mounted within the toilet bowl (see col. 4, line 61+).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 4, 6, 8, 15 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4,203,173 (hereinafter Morris).

In regard to claims 1, 3 and 8, Morris discloses a toilet comprising a bowl (11) sized to contain a liquid; a valve (16,27) movable from a normally-closed position in which the liquid does not flow to the bowl to an open position in which the liquid is delivered to the bowl; a sensor (37,20,13,19), which is a liquid level sensor operable to sense a liquid level within the bowl and output an electrical signal indicative of the liquid level; an actuator (29) movable between a flush position and an idle position; and an electronic controller (31) coupled to the sensor to receive the electrical signal, the controller operable to move the valve to the open position in response to movement of the actuator to the flush position and the receipt of the electrical signal having a value indicative that the liquid level within the bowl is below a predetermined level.

In regard to claim 4, at least a portion (19) of the sensor is disposed within the bowl.

In regard to claim 6, the controller inhibits movement of the valve to the open position when the sensor senses a liquid level above the predetermined level (see col. 6, line 25 et seq.).

In regard to claims 15 and 21, the method as claimed would be inherent during normal assembly and use of the Morris device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2, 9, 11, 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris in view of US Patent 6,178,569 (hereinafter Quintana).

The Morris reference teaches all of the claim limitations as discussed above except for the valve being a solenoid-actuated valve, attention is direct to the Quintana reference which teaches an analogous toilet having an overflow control system comprises a sensor (12) mountable within a toilet bowl and working in conjunction with a solenoid-actuated valve (14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the valve of Morris with a solenoid-actuated valve as, for example, taught by Quintana, where in so doing would involve mere substitution of one functional equivalent water flow control valve for another and the selection of any of these known equivalents to control the flow of a liquid would perform equally well on the Morris device. The placement of the valve sensor is obvious as taught by Quintana. The method as claimed would be inherent during normal assembly and use of the Morris in view of Quintana device.

4. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris in view of US Patent 3,928,874 (hereinafter Albertson).

The Morris reference teaches all of the claim limitations as discussed above except for the sensor being a pressure sensor, attention is direct to the Albertson reference which teaches an analogous toilet having an overflow control system comprises a pressure sensor (48) for detecting a liquid level in case of clog up (see col. 2, line 43 et seq.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace sensor (37) of Morris with a pressure sensor (48) as, for example, taught by Albertson, where in so doing would involve mere substitution of one functional equivalent water level sensing device for another and the selection of any of these known equivalents to sense the level of a liquid would perform equally well on the Morris device. The method as claimed would be inherent during normal assembly and use of the Morris in view of Albertson device.

5. Claims 7, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris in view of US Patent 6,671,893 (hereinafter Quintana et al.).

The Morris reference teaches all of the claim limitations as discussed above except for a timer as claimed, attention is directed to the Quintana et al. reference which discloses an analogous toilet having an overflow control system comprises a timer as claimed (see col. 3, line 34 et seq.) to close the valve after it has been in the open position for a predetermined length of time because it might get stuck. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ, on the Morris device, a timer as, for example, taught by Quintana et al. in order to prevent overflow because the valve might get stuck. The method as claimed

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would be inherent during normal assembly and use of the Morris in view of Quintana et al. device.

6. Claims 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris in view of Quintana as applied to claim 9 above, and further in view of Albertson for the same reason as indicated in item 7. The functional language in claim 14, obviously, is an inherent feature of the pressure sensor of Albertson.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morris in view of Quintana as applied to claim 9 above, and further in view of Quintana et al. for the same reason as indicated in item 8.

Allowable Subject Matter

8. Claim 22 is free of the prior art of record and is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

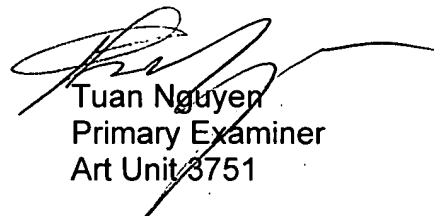
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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan N. Nguyen whose telephone number is 571-272-4892. The examiner can normally be reached on Monday-Friday (10:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tuan Nguyen
Primary Examiner
Art Unit 3751

TN